Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

CW 77: Area + Perimeter in the Coordinate Plane

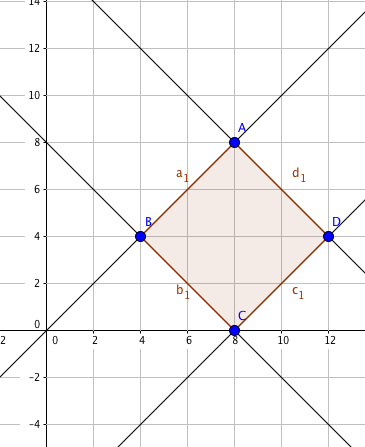
**Honors Geometry**

Criteria for Success: Did you…

* Correctly graphs the lines on a graph
* Identify the correct shape
* Determine the base/height pair of the shape
* Use the correct area formula

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| 1. What is the area of the region bound by , , and ? | 2. What is the area of the region bound by , , y=10, and x=2? |
| 3. Plot line k, . What is the area bound by line k and the x and y-axis? | 4. What is the area of the region bound by , , and ? |
| 5. What is the area bound by the x & y-axis and the line ? | 6. What is the area bound by the x & y-axis and the line ? |
| 7. The area of a rectangle is 80 sq. units. If the x and y axis make up two of the sides, what are the possible equations for the remaining sides? | 8. A region is bound by the lines ,  , and the x- axis. What is the area of the bounded region? |
| 9. What is the area bound by the lines , , and ? | 10. What is the area bound by the lines , and ? |

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| You will be able to write the equation for the lines that create a shape in the coordinate plane, given the vertices. Directions: Plot the points. Write the equation for the line of each side. | |
| 11. The triangle ABC with vertices . | 12 The quadrilateral HUIR with vertices |
| 13. The quadrilateral KNDF with vertices | 14. The triangle ULF with vertices |



1. **Part I**
2. Find the area of the square ABCD.
3. Find the perimeter of the square ABCD.
4. What is the length of the diagonal of the square?

**Part II**a) Given the square ABCD, write the linear equation of the line that goes through points AB (in slope intercept form, y=mx+b)  
  
b) Write the linear equation of the line that goes through points CD. What is similar about the equation in part a? What is different?

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| Directions: Graph the given coordinates for the vertices of the triangles below. Then write a linear equation for each side of the triangle. Each question should have three distinct linear equations. | | |
| 1. A = (2,4) B = (-1,2) C = (2,0) | 1. A = (3,5) B = (-1,4) C = (2,-2) | 1. A = (2,10) B = (-4,-4) C = (10,0) |